

3 an iron-comprising body in continuous electrical contact with the chromium volume; and  
4 an acid solution in continuous contact with both the chromium volume and the iron-  
5 comprising body, wherein the chromium body is being etched at an etch rate.

*Al Sub B1*  
1 19. (Amended) The electrical structure of claim 18, wherein the electrical structure  
2 further comprises a chromium oxide layer on the chromium volume.

1 + 20. The electrical structure of claim 18, wherein the acid solution includes hydrochloric acid  
2 in a liquid bath form.

1 + 21. The electrical structure of claim 18, wherein the acid solution includes hydrochloric acid  
2 in a spray form.

1 + 22. The electrical structure of claim 18, wherein said iron-comprising body includes steel.

1 + 23. The electrical structure of claim 18, further comprising a layer of conductive metal,  
2 wherein the chromium volume includes a layer of chromium, and wherein the layer of chromium  
3 is on the layer of conductive metal.

*Sub B2*  
*A2*  
1 + 24. (Amended) The electrical structure of claim 23, wherein the acid solution is not in  
2 contact with the layer of conductive metal.

1 + 25. The electrical structure of claim 24, wherein the iron-comprising body includes steel,  
2 wherein the acid solution includes hydrochloric acid, and wherein the layer of conductive metal  
3 includes a metal selected from the group consisting of copper, aluminum, nickel, silver, and gold.

AB  
SUB B3

1 26. (Amended) An electrical structure, comprising:  
2 a chromium volume;  
3 an iron-comprising body in continuous electrical contact with the chromium volume; and  
4 an acid solution in continuous contact with both the chromium volume and the iron-  
5 comprising body, wherein the chromium body is being etched at an etch rate; and  
6 a layer of conductive metal, wherein the chromium volume includes a layer of chromium,  
7 wherein the layer of conductive metal is on the layer of chromium, wherein the conductive metal  
8 includes an opening extending through its thickness, wherein the opening exposes the layer of  
9 chromium, wherein the iron-comprising body is in continuous electrical contact with the  
10 chromium volume, and wherein the acid solution is in contact with both the iron-comprising  
11 body and the chromium volume within the opening.

1 27. The electrical structure of claim 26, wherein the iron-comprising body includes steel,  
2 wherein the acid solution includes hydrochloric acid, and wherein the layer of conductive metal  
3 includes a metal selected from the group consisting of copper, aluminum, nickel, silver, and gold.

1 + 28. The electrical structure of claim 18, wherein the iron-comprising body includes steel,  
2 wherein the chromium volume includes metallic chromium, wherein the acid solution includes

hydrochloric acid, wherein a temperature (T) and a molarity (M) of the hydrochloric acid is within a triangular space defined by (T,M) points of (21 °C, 2.4 M), (52 °C, 2.4 M), and (52 °C, 1.2 M), and wherein the etch rate is at least a factor of about 2 greater than an etch rate that would occur in an absence of the iron-comprising body.

+ 29. The electrical structure of claim 18, wherein the iron-comprising body includes steel, wherein the chromium volume includes metallic chromium, wherein the acid solution includes hydrochloric acid, wherein a temperature (T) and a molarity (M) of the hydrochloric acid is within a triangular space defined by (T,M) points of (21 °C, 2.4 M), (52 °C, 2.4 M), and (52 °C, 1.2 M), and wherein the etch rate is at least about 5 Å/second.

+ 30. The electrical structure of claim 18, further comprising a flouropolymer dielectric volume bonded to said chromium volume.